CAI EP 20 -7003

ECOTOUR of the Trans-Canada Highway

Newfoundland East



Introduction to Newfoundland East

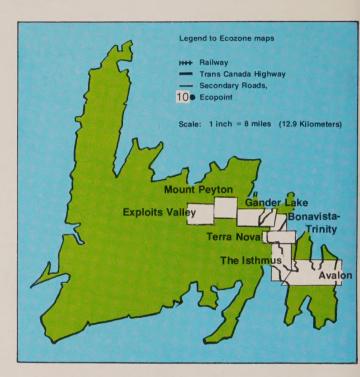
The Ecotour, Newfoundland East, winds its way through boreal wilderness underlain by time-tempered rock which once formed part of an ancient ocean floor and an even more ancient Afro-European continent. The Old World continent drifted westward some 400 million years ago. As a tneared North America the ocean floor buckled upward forming part of what is now central Newfoundland. The Old World eventually rafted onto North America. After 200 million years a rift separated the continents once again and Afro-Europe drifted eastward. But some parts remained welded to North America. Much of eastern Newfoundland, from Glovertown to St. John's, is underlain by such rock.

This land was shaped and reshaped by the building of the Appalachian Mountains and within the past two million years by the glaciers of successive ice ages. After the last ice age, about 10,000 years ago, barren soils were gradually covered by the boreal forests, bogs and heath. The Beothuk Indians moved into the region, followed in the 17th century by the European livyers searching for the fat-bellied cod along the coasts. These livyers came from Ireland and the west-country of England, first to the headlands, then into the filigree bays and coves lacing the eastern coastline. In time a few settlers moved inland. Settlement changed and is still changing the landscape, yet, just off the beaten track are virgin heath, bog and forest with clean cool water, sea freshened air and exhilarating wilderness experiences.

A word about Ecotours

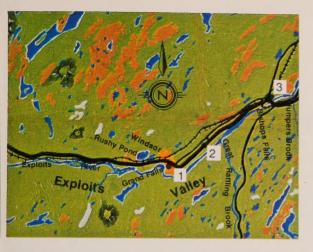
Ecotours are devised by the Canadian Forestry Service to help you, as a traveller, understand the forces that have shaped the landscape you see — forces ranging from earthquakes to earthworms, from west winds to white pines. This ecological interpretation includes features of natural as well as human history. The route covered by Ecotours is divided into major landscape types (Ecozones) and a map for each Ecozone shows location of interesting ecological features (identified by code numbers) and distance between these points of interest. While most ecological features can be seen without stopping, a stop is suggested for some points of interest. Maximum value from this Ecotour will be derived by keeping a record of the mileage and by reading information on each point of interest before reaching its location.

J. S. Maini Program Co-ordinator, Environmental Concerns.



Ecotour, Newfoundland East, traverses through seven Ecozones. The first Ecozone, Exploit's Valley, overlaps with the Ecotour Newfoundland West. The other Ecozones are Mount Peyton, Gander Lake, Terra Nova, Bonavista-Trinity, The Isthmus and Avalon. To learn more of Newfoundland take side trips into some outports, such as Happy Adventure, Salvage, Old Perlican and Brigus. Take day-trips to Bonavista, to Baie d'Espoir, down the Burin, around St. Mary's Bay or out to the bird islands off Witless Bay.





This rolling landscape is blanketed by a mixed forest of hardwood and softwood trees, interrupted in poorly drained depressions by small bogs and fens. A half-century of logging has greatly increased the abundance of hardwoods. particularly the aps and birch. Reddish Silurian sandstones deposited by ancient rivers 400 million years ago are exposed in the rock cuts. Ripple marks, mud cracks and even rain drop prints are recorded in the stone. The Exploits River, dominant feature of the Valley, was used by prehistoric Beothuk and by the European explorers Cartwright and Buchan as a highway into the unknown interior.



Grand Falls, on the north bank of the Exploits River and surrounded by boreal forest, has been a pulp and paper town since 1909. Stockpiles of pulpwood and chips in the millyard, and the sulphur smell in the air - on most days - are the town's trademarks. To meet the demands of the mill, an average of 20 square miles of forest are mechanically harvested each year. Less mechanized pioneer logging methods are displayed at the town's museum.

2.0 miles

Exploits Valley

2 To the south look beyond the roadside alders into the forest — a mixture of many native hardwood and softwood trees. This mixed forest has resulted from frequent disturbances by man who, for the past half-century, has used the area for recreation, hunting and sporadic wood cutting. It is an excellent spot to make a leaf collection from the birch, cherry, mountain ash, maple, aspen, wild raisin and alder. While collecting keep watch for small birds like the yellow warbler, Wilson's warbler, water thrush and ovenbird.

9.2 miles

3 Down the Exploits River, you can almost picture the ochre-stained Indians, gliding over the waters in seaworthy birch-bark canoes. For a thousand years before the coming of Europeans, the Beothuks used the Exploits as their highway linking the Atlantic coast to the interior. From late winter through fall, the Beothuks camped on the coast, hunting sea birds and seals, gathering eggs and fishing. In late fall they moved inland to hunt migrating caribou. When Europeans settled the coast, the Indians were denied the resources of the sea and their numbers dwindled. Some were senselessly killed by the settlers and the tribe became extinct in the early 19th century.

8.2 miles



- 1. Red Maple 2. Mountain Maple
- 3. Mountain Ash
- 4. Trembling Aspen
- 5. Speckled Alder
- 6. Green Alder
- 7. Wild Raisin
- 8 White Rirch
- 9. Pin Cherry
- 10. Willow



To the west this Ecozone is distinguished by an undulating topography, exposed walls of black basalt and acid soils with poor coniferous forests. East of the turnoff to Norris Arm the landscape changes abruptly. This flat land has few rock outcrops and is covered by a mixture of spruce, larch and fir forests broken helter-skelter by networks of streams and ponds or by quilts of green sedgy fen and sphagnum moss bogs.





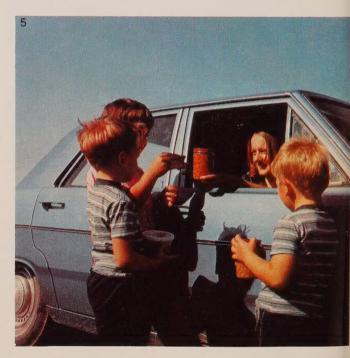
Mount Peyton

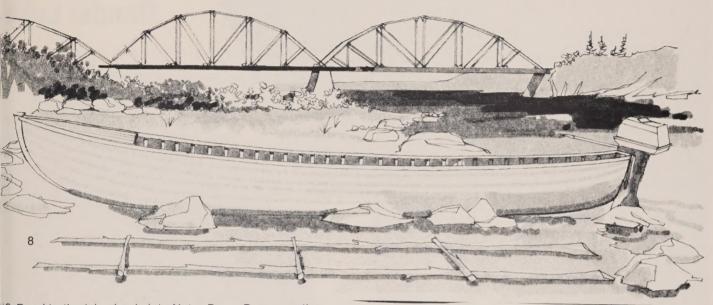
4 In this fir forested valley there are many rockcuts exposing walls of volcanic basalt, also known as black granite, an excellent stone to polish. Between the outcrops look for a trickle of water named Rattling Brook. Headwaters of this once-wild salmon river now flow through the black, worm-like penstock (one mile east) to nearby power generators. From 1957-1964, Federal Fisheries biologists captured the total salmon run of Rattling Brook, about 1600 fish, and transferred them to Great Rattling Brook, a tributary of the Exploits River.

5.4 miles

5 Near the turnoff to Norris Arm, just west of Eel Brook, children often sell to motorists the wild produce, picked from the land or caught from stream and pond. Blueberries, bakeapples, raspberries and partridgeberries are all available in season. Sometimes a **gad** of brook trout or in winter and spring, a catch of smelt may be offered. East of the turnoff look for flat-topped fir trees. This is the sign of damage caused by the insect pest, the balsam woolly aphid.

2.4 miles





6 Road to the Isles leads into Notre Dame Bay, once the summer home of the Beothuks. Places like Comfort Cove and Spirit Cove are rich in Indian history. Just east is Notre Dame Provincial Park with its pond of cool, deep-blue waters ringed by black spruce and var forests and with shoreline fringed by dwarf shrubs. This pond is typical of glacier-gouged ponds in northern woods.

4.3 miles

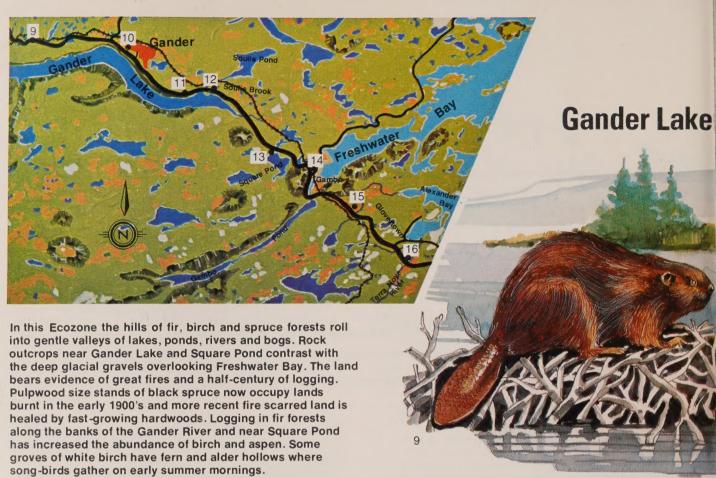
7 Here the forests are interlaced by wet meadow-like sedgy fens. The little **moldow** draped trees, dotted over the fen are **juniper**. Such poorly developed trees are locally called **cranics**. Surprisingly, many cranics are more than a century old, older even than the tall surrounding forest. Their growth is stunted by a lack of nutrition from the water-logged peat soils.

6.2 miles

8 Home crafted Gander Bay boats, descendants of Old Town canoes imported from Maine, lie impatiently along the banks of the Gander River. With keel, stem and stern of spruce, ribs of larch and plank of fir these boats are designed to meet challenges of rough waters and to carry full loads of 1500 pounds over shallow riffles. From the first days of settlement in Glenwood these boats were poled to and from Gander Bay - linking coastal villages and railway. Over the years the boat was lengthened and a transom added for the motor to suit the needs of sportsmen.

3.3 miles





9 Just east of Glenwood Provincial Park slow down and look north of the road for a ghostly grey patch of dead trees, result of an old beaver dam. Newfoundland's beaver is a sub-species of the mainland beaver. Because its favorite food, trembling aspen, is in short supply in many parts of the Island the animal has become dependent on alder and birch as main sources of food and construction materials. The beaver was trapped to near-extinction before the 1930's, but wise wildlife management has since rebuilt the population to its present high level. Keen eyes can spot other areas of beaver activity along the Ecotour route.

10.1 miles

10 For aviation buffs there is a vivid pictorial display at Gander International Airport which records Newfoundland's colorful history in aviation. Gander became famous during the Second World War as the jumping off point for ferrying bombers from North America to Europe. Many ill-fated aircraft from times of war and peace lie in bog or forest graveyards around the town. Today Gander provides another vital role in air-transportation as the control centre of North Atlantic air traffic.

11 This swath of forest land was blackened by the Gander Fire of 1961. During that hot summer, this fire and 270 others ravaged more than a million acres of forest in Newfoundland. High winds swept the Gander Fire toward the northeast coast. Families at Wesleyville and other coastal towns were denied the sun for many weeks by ominous clouds of suffocating smoke. Great fire years like 1961 have occurred about once every decade during the past century. The most terrifying was the summer of 1904 when one-third of the Island was ablaze. Yet, from the ashes spring pioneer hardwoods, soon frequented by moose, small mammals and by fox sparrows, white throated sparrows, warblers and woodpeckers. This new life soon erases the signs of holocaust and demonstrates the resiliency of nature.

2.1 miles

12 At Soulis Brook the ecotour tips around Gander Lake. This thousand foot deep, cold lake is rather unproductive in fish. But, for the experienced canoeist the lakeshore holds the promise of hard rugged granite cliffs, water-sculptured soft sedimentary promentaries and lonely 'pine-tree' islands.

13 Square Pond is the habitat of the largest land-locked Arctic char in the Island. Best char fishing is from ice-breakup in May until late June. With the char are populations of brook trout, sea-run Atlantic salmon and the spirited Ouananiche (land-locked Atlantic salmon).

6.8 miles

14 Stop at the lookout over Gambo. You are standing on a kame deposit laid down by streams which flowed from the side of the glacier about 10,000 years ago. A quick scan includes Freshwater Bay (with its drowned shorelines, slowly re-emerging from the sea since the glacier retreat), the 20 foot deep Gambo bog and the rockstudded Gambo River, which carved this valley. North from Gambo a gravel road leads to Wesleyville and the homes of past great sealing captains — the Keans, the Winsors and the Blackwoods.

5.1 miles



14







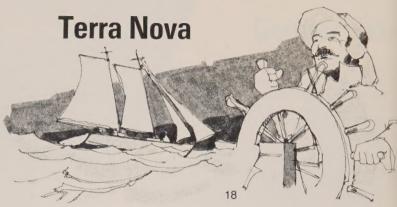
15 Red pine groves are so rare in Newfoundland that they appear almost unnatural in the landscape. It is unfortunate that the tree has preference for the same sandy soils which are desired in road construction. Also adding to the tree's troubles are the home gardeners who collect the young seedlings. Some older pines have been cut only for their tops to be used as Christmas trees. All such abuses have to be stopped if such a rare species in Newfoundland is to survive. It is better to show where it is rather than where it was.

4.9 miles

16 Pasture land, grassy-green in summer, is uncommon along the Trans Canada Highway. This pasture near the banks of the Terra Nova River was, until recently, an acid peat bog densely covered by knee-high **goowiddy** of sheep laurel and Labrador tea. Perhaps you can see parallel ditches constructed to drain the bog. East of the road is the community pasture; west is a community hay development. Sweet-tasting carrots and many other vegetable crops are also produced on nearby peatlands.

4.3 miles





Set within a rugged topography and underlain by ancient (600 million years old) Precambrian rock this Ecozone is typified by a dense, dark cover of boreal forest irregularly broken by fen or bog filled hollows. The forests extend to the edges of steep-sided fjords and rounded salt-water bays. Streams, pushed from old water courses during glaciation have developed rapids and many small waterfalls as they carve new valleys. The old Atlantic shoreline, drowned by post-glaciation seas, is slowly re-emerging. Once dry land valleys like Newman Sound and Clode Sound extend many miles beneath the sea into an underwater seascape with sharp sided cliffs plunging to 900 feet.

17 To the northeast look for the rounded Louil Hills flanking Southwest Tickle of Alexander Bay. This is only one of the many glacier-carved fjords or sounds which penetrate Terra Nova National Park. The park offers opportunities to explore an unspoiled coast line with its marine environments knitted into boreal forest. Getting to know the park through its nature trails and interpretative programs can be a funfilled educational experience.

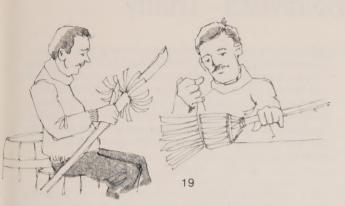
2.5 miles

18 Wind your way upwards to the Blue Hills Lookout which provides a panoramic view of a forested island-wilderness in Bonavista Bay. Relax and think of the early





D. Quinton Photo



fishermen who navigated such waters without charts; relying on honed instinct and ability to read the coast, the wind and the swell on the sea. Navigation courses for some journeys were memorized in song. Wadham's Song, from about 1756, was considered by the British Admiralty to be the best coasting guide between Cape Bonavista and Fogo. First verse

'From Bonavista Cape to the Stinking Isles The course is North, full forty miles; Then you must steer away N.E. Till Cape Freels Gull Island bears W.N.W.'

Many navigation songs have not been recorded and are lost forever.

6.2 miles

19 This crown of white birch pleasingly contrasts with the darker fir and spruce forests. Enterprising Beothuks used the birch bark to make mamatuks (wigwams), canoes, dishes, drinking cups, water-buckets and ornaments. Micmacs in Newfoundland were known to hollow-out conks from birch for use as tinder boxes, enabling them to carry fire. Young birch were used by early settlers to make birch brooms, an art still retained in many outports.

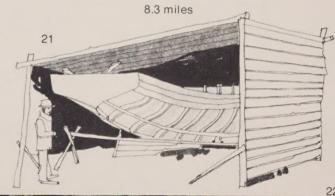
2.0 miles

20 Take time for a visit to Ochre Hill. The advances and retreats of the great ice masses which shaped the park are vividly illustrated in displays in the tower on the hill. A short self-guided tour follows the clues of a glacier trail — clues like striated and polished rock and thin lichen vegetation. Along the roadside near the turnoff to Ochre Hill silver reflectors designed to reflect headlight beams have been mounted on green poles. The reflected light discourages moose from running onto the highway. In 1973 eleven moose were killed in the park by cars.

21 Clode Sound is just one of many wooded inlets in Bonavista Bay. Up until the 1940's fishermen with their families would spend winters in such wooded bays. They lived in winter tilts and with the use of a pit-saw built themselves a Labrador schooner from the forest. After the spring launching the family sailed northward to claim a berth in the Labrador fishery. This kind of forest-primevial boat-building exemplified the adaptation of the fishermen to his sea forest environment.

12.0 miles

22 Slow down near Northwest River and spot the majestic white pine growing from the river bed. The Northwest, along with the Salmon River and Southwest River are termed "late rivers" by sports fishermen because their salmon runs do not peak until the first two weeks in July. Atlantic salmon are smaller in eastern rivers than in the Humber and other west coast waters. Yields are also lower, the average annual yield in Northwest River is about 135 fish







This Ecozone links Bonavista and Trinity Bays across the base of the Bonavista Peninsula and continues southward through a coastal fringe of forest which grades into the scrubby vegetation of the Avalon Forest Section. This part of Trinity Bay lacks productive fishing grounds and most towns in the area were founded to supply lumber for the fishery undertaken from eastern barren headlands. Just inland, beyond the coastal forests lie the barrens, the caribou country of lichen heath, bog and fen that blanket southern Newfoundland.

23 Southwest River Valley brims with colors in autumn; vellows and reds of birch, aspen and maple are melded with the homespun golds of larch. Roadside banks of red shales add to the display. One mile east of the shales is a fresh rockcut through a volcanic wall of royalite and andesite — a recommended stop for rock hounds. In the pinkish matrix of the rock wall search for tiny, almond shaped deposits of white calcite and green epidote which fill once-empty gas bubbles left in consolidating lava.

2.0 miles



Bonavista - Trinity

24 Near Thorburn Lake the Ecotour crosses the famed Cormack's Trail. On September 5, 1822, William Epps Cormack and his troublesome Micmac guide, Sylvester, left nearby Smith Sound on their adverturesome trek across Newfoundland. The purpose of the trek was to make contact with the vanishing Beothuks — a fruitless mission. Yet Cormack did name many landmarks and provided the first detailed descriptions of the unknown interior.

6.7 miles

25 Back dropped by white birch thickets on rubble strewn slopes is the scenic Shoal Harbour River valley. Few fishermen may know that this river supports the only known sea-run rainbow trout in Newfoundland, Rainbow trout, the favorite of many anglers, were first introduced to the Island from California in 1887. The fish are mainly concentrated in streams on the northern portion of the Avalon Peninsula.

69 miles

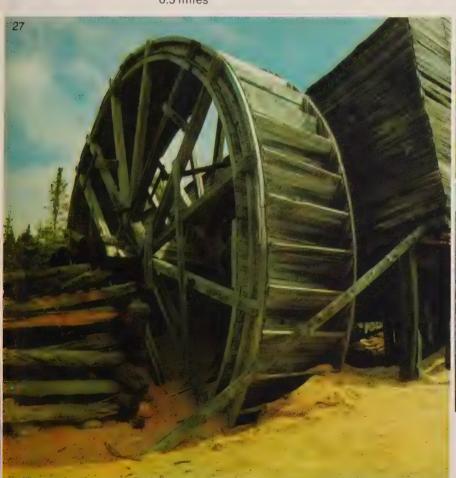
26 Stop at the lookout over Northwest Arm where the highway is dwarfed by massive walls of red granite. This rock was formed from firey lava thrust upward through the earth's surface 400 million years ago. Look at the surrounding forests. In the 1770's winter-crews combed these woods for timbers to supply Benjamin Lester's shipyard at Trinity. Gun brigs and ships of trade were built in Trinity Bay by the British after they were denied use of forests in the American colonies because of the War of Independence.

2.6 miles MAP SHOWING ATLANTIC CORMACK'S ROUTI OCEAN GULF OF ST. LAWRENCE St. Georges Clode Sound Harbour White Bear River

- 27 Nestled snugly in the cove at Deep Bight is the weatherworn remnant of an old water powered sawmill, one of the last of dozens dotted along the wooded inlets of Trinity Bay thirty years ago. Take the side road to the mill. Why not photograph the ingeniously constructed wheel. It may not be there next time you pass by. Deep Bight, Clarenville and other towns on the western shore of Trinity Bay began as woodcutters' camps in the mid 1800's. These camps were established to supply limber for the prosperous fishing towns of Grates Cove, Hants Harbour and Old Perlican on the barren eastern headlands.
- 28 Travelling south past Queen's Cove the highway climbs upward. You are crossing from the Central Forest Section into the Avalon Forest Section of the Boreal Forest Region. Hugging hillsides to the north are dense fir and spruce forests but southward are bogs, heath and pockets of stubby fir, all trademarks of the Avalon Section. This vegetation grows under stress from a harsh climate and from thin, poor soils.

10.8 miles

6.5 miles









This Ecozone is set apart by its vegetation of lichen crusted rock barrens, sedgy bogs, goowiddy heath, tuckamore and pockets of fir forests on more protected lowlands, all patched together into a seemingly haphazard mosaic. This legacy reflects the harsh climate, a long history of fire and the poor nourishment sparingly offered from thin acid soils. This is also a fog zone, thick fogs and mausey days are far too frequent, particularly in July when it is foggy 40% of the time.



The Isthmus

29 Visit the lookout near Sunnyside on the neck of the Isthmus. If fog co-operates you can view Trinity Bay to the east and Placentia Bay to the west - two of Newfoundland's most productive inshore fishing grounds. Intruding over the blankets of deer grass bog and dwarf-shrub heaths are the transmission lines carrying energy from Bay d'Espoir to feed new heavy industry such as the oil refinery at Come-by-Chance.

3.9 miles

30 In direct contrast with scenes at nearby fishing settlements like Sunnyside and Arnold's Cove are the sights of towering stacks and flame of the Come-by-Chance oil refinery just west of the road. Close by the road are scars left by highway construction: the silted-over Freshwater Pond, an open gravel pit and exposed soils bared by excessive bulldozing. Hopefully environmental constraints will eliminate some such practices, and a program is underway to revegetate some exposed pits. Perhaps another project for us all should be the elimination of another eyesore, the endless string of pop cans and other litter along the roadside.

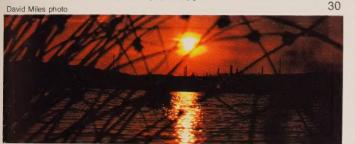
8.7 miles





31 Slow down for the next few miles. Try and spot the railway track as it twists and turns through Precambrian hills. This old narrow gauge track is only three feet six inches wide. Because of the innumerable ponds, rivers and ridges the tracks meander 547 miles to cross the 300 mile wide Island. Some grades are steeper than those in the Rocky Mountains, and the curves are the sharpest in Canada. Then come the bridges, an average of one every four miles across ravines, streams and rivers.

3.1 miles



32 If it is not shrouded in fog you can see a strange landscape of eerie beauty. Grey, frost-shattered hills of Precambrian rock which defy any but the lowest vegetation to cover them. Some geologists believe that these rocks were once part of the Afro-European continent that rafted unto North America 400 million years ago.

3.1 miles

33 On a clear day stop near the crest of the hill south of the junction for Chance Cove. Walk westward over the moss covered barrens. You can look out to Placentia Bay with its island studded waters where oil supertankers navigate enroute to Come-by-Chance. Let your eyes drift to the vegetation. You may be standing near clumps of arcticalpine flowers mixed with the ever present crowberry, alpine blueberry and partridgeberry. Eastward the road cuts through the Doe Hills, an arctic moonscape of lichen multicolored rocks shattered by frost. Look for stripe patterns in the soil. These patterns are also caused by frost action.

2.7 miles

34 Take a diversion to the coastal lowlands to Bellevue Beach Provincial Park. You can camp, picnic or just enjoy the sea-coast environment. Inquire about the sea-shell exhibits. Children may prefer to search for sea-shells on their own, or to collect colorful pebbles along the barachois. Mosey along the shoreline and look for blue mussels, barnacles, periwinkles and limpets. See how



many kinds of sea-birds you can spot. There are gulls, stearins, tickle-asses, and sea pigeons for a start. Or just relax and maybe later take an amble along to the lookout to see the Dog-Head rock. If you visit the park in late June or early July you might witness the caplin scull.

0 miles

35 The heart of Newfoundland is the outport, and the fisherman is its soul. Visit the outport setting with a leisurely drive through the tranquil village of Thornlea, and along the rugged coastline of Norman's Cove and Chapel Arm.

2.1 miles

36 Look for moldow laden trees. Moldow or old man's beard is the yellow-green and black lichens which grow in profusion from the branches of more scraggly weatherbeaten trees.

7.2 miles

37 Four miles east is Chapel Arm. This part of Trinity Bay was once the focal point of Newfoundland whaling operations. Up until 1973, pothead whales were driven ashore by dorymen and slaughtered in the shallow waters. The meat was used mainly as food for nearby mink farms like those in Blaketown. An incredible total of nearly 10,000 potheads were slaughtered in 1956 and another 8,000 the next year. There is, at present, a moratorium on all pothead whaling.

6.8 miles





The Avalon is underlain by a basement of Precambrian rock covered by inches to hundreds of feet thick glacial debris interlaced by countless small to large size ponds. Burning and wood-cutting since the early 17th century have reduced large areas of woodland to tuckamore and goowiddy barrens covered by sheep laurel and Labrador tea. Trinity Bay, with its deep, productive waters, and the less productive Conception Bay are both necklaced by fishing settlements which grade eastward into the eastern terminal of the Ecotour, St. John's. Within the region are magnificent sea-scapes, too often scarred by ugly signs of wastefulness—car wrecks, broken glass and the ever present pop can.

Dragon's Mouth

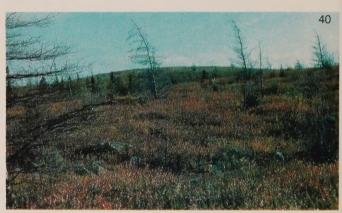
38





38 From the crest of the hill look to the southeast at the rolling tear-drop hills of gravel drumlins and moraine ridges, deposited and streamlined by advance and retreat of glaciers. These deposits are evident for the next 20 miles, sometimes intermingled with bog-filled hollows. On these bogs are delicate pink orchids, marshberries, and the most coveted of Newfoundland's berries, the soft-bodied bakeapple.

Avalon



39 Impoverished forests near Hodgewater and Ocean ponds are typical of the Avalon region. The straighter stems of bushy-topped small spruce were once commonly used as stovepipe and chimney cleaners by the inventive fishermen.

3.8 miles

40 Stop near Old Man's Pond. Just east is a small recently burned-over hill sparsely covered by larch with their tops prayerfully bent to the east. For the next few years this, and other recent burns will become the late-summer habitat of blueberry pickers. Soon after the picking the remaining berries are caught by early frost and in autumn the hill is transformed in color — first the green-golds and later harvest-golds of larch underlain by scarlets of blueberry leaves. In time blueberries will give way to the aggressive sheep-laurel, the dominant heath shrub on the Avalon.

8.3 miles 12.1 miles

Caribou - Shedding Coat D. Durling Photo



41 Eastward the Ecotour route climbs from productive forest toward the Hawke Hills. You can see the treeline on the slope of the hills. The more adventurous can drive or hike along the narrow gravel road to the summit. Here the climate is arctic-like. The soil is patterned by frost-shifted stones and stitched with strings and patches of arctic-alpine, ground-hugging shrubs. Exposed stubborn spruce, some centuries old, grow in prostrate form, only ankle high. If you hike southward over the downs you may glimpse the Avalon caribou herd. About 1600 strong, this herd boasts some of the largest of its species in the world.

1.7 miles

I2 In this valley, behind the service-station, ice-age clues have been found which may prove this area to be the melting site of the last shrinking ice-cap on the Avalon.

3.0 miles

13 These are the barrens, a desert-like land of shallow, acid rocky ground with peat filled cavities. Pockmarked with small glacial ponds and strewn with massive erratics (rocks and boulders) dropped like grains of sand from the ice, the landscape is a monument to glaciation. It





D. Miles Photo

is a strange land to some where you can feel the proximity of an ice-age. The heath vegetation with its sheep laurel, Labrador tea, crowberry, partridgeberry and myriad bizarre and primitive forms of lichen is also the habitat of the willow ptarmigan, horned lark, and Canada Goose.

3.6 miles

44 From the hill you can view Kelly's Pond, ringed by white-weathered granite rocks. These are special rocks closely related to rocks in Morocco, providing additional evidence supporting the continental drift theory.

4.1 miles





44

45 Route 61 leads to the eastern shores of Conception Bay, an area featured by historic villages, squid jigging grounds, bluefin tuna, Bell Island mines (1893-1966) and seafaring men. Another Bay feature, for serious minded fossil hunters, are the trilobite-rich black shales near the mouth of Manuels River.

5.2 miles

- 46 North of the highway is Paddy's Pond. This pond, like many others along the highway, has a good population of pan-size brook (mud) trout. Also lurking beneath the waters are Ouananiche, rainbow trout and German brown trout. German browns, almost restricted to the Avalon Peninsula, were first introduced from Scotland in 1884.
- 47 St. John's, the oldest city in North America and eastern terminus of the Trans Canada Highway, has for five centuries been the western terminus of many North Atlantic sea routes. The Atlantic waters, chilled by the Labrador current, approach the city through cliff sided narrows. Wooden houses anchored in sea-washed crags contrast with highrise urban complexes. There is a provincial museum on Duckworth Street with relics and pictorial displays of Newfoundland's early cultures. From the city take an exhilarating sea-coast journey along Marine Drive or out to Cape Spear the most easterly point of land in North America.



Environment

Environnement

Canada

Canada

Forestry Service

Service des forêts

Contribution to the Man and the Biosphere Programme/Canada

Contribution au programme 'L' Homm et la biosphère/Canad

Glossarv of Terms:

aps bog - trembling aspen (Populus tremuloides)

conks

- open, nutrient deficient, shrub and sedge covered peatland

- large fungi growing on birch

cranics fen

- scraggly trees - open, meadow-like, nutrient enriched peatland

gad

- a string of fish

goowiddy

- dense cover of short shurbs - larch (Larix laricina)

juniper

livyers

- early Newfoundland settlers

mausev

- misty rain

moldow scull

- (old man's bear), lichens which hang from trees

- caplin spawning on the beaches

sea pigeons

- quillemots - terns

stearins tickle-asses

- kittiwakes

tuckamore

eile

- temporary winter shelter

- wind-stunted densely growing fir and spruce

- balsam fir (Abies balsamea)

Credits:

Interpretation and Production Supervision: F. C. Pollett Canadian Forestry Service

Photography: K. McVeigh - Photo Unit, Dep. of Environment

Technical Assistance: J. P. Bouzane, W. J. Meades, T. Thomas, A. W. Robertson

Canadian Forestry Service Sketches: T. Mills, A. W. Robertson

Maps: G. Boland, Ted Mills Studio Limited Design and Production: Ted Mills Studio Limited

Our forest environment and the Canadian Forestry Service

The volume and multiplicity of forest products has earned Canada a place of prominence among the forest nations of the world. But now, with a dawning comprehension of its role in the great ecological complex. Canadians begin to perceive the forest's broader value as a stabilizer of desired natural patterns and as a retreat for the relaxation and well-being of a people living in crowded cities.

The Canadian Forestry Service of the Department of the Environment is intimately concerned with the forest environment and the forest industries. Its objective is to promote the most efficient management and use of Canada's forest resources compatible with environmental concerns by:

- conducting research and development in the forest management and forest products fields.
- disseminating information and providing technical services to provincial governments, forest industries, and other agencies.
- preparing and distributing information to the general public.
- providing grants to universities to encourage development of centres of research excellence in forestry.



©Information Canada Fo25-13/1975